Mountain Plover Population Inventory and Habitat Management Comanche National Grasslands, 2009

Introduction

During 2009, mountain plover surveys were conducted on prairie dog colonies and one prescribed burn. Mountain plovers may utilize prairie dog colonies during the breeding season. For this reason, a subset of six prairie dog colonies distributed across the Carrizo Unit of the CNG were surveyed for mountain plovers during May and early June of 2009, following the same methods as in 2008 where the entire colony is gridded. These colonies were randomly selected from the list of active colonies in 2008. This is a much smaller survey than those in 2005- 2007, mainly due to a dramatic decline in active prairie dog colonies. Mountain plovers may also utilize prescribed burns for breeding. One prescribed burn (Aubrey Trail) was completed on the Carrizo Unit of the Comanche within potential Mountain plover habitat.

Mountain plover population surveys

Burns: During May of 2009, a systematic grid of points was surveyed in the burn with grid points spaced at approximately 0.2 mi intervals (Svingen and Giesen 1999). At each point, the observer would leave the ATV for several seconds to show a human silhouette (to cause any nearby plovers to move off of the nest) and then hop back on and scan with binoculars for 2-3 minutes. In areas with suspected nesting plovers or significant amounts of bare ground, the survey interval was shortened to 0.1 mi in order to more intensively survey the area. One prescribed burn occurred in potential mountain plover habitat (shortgrass prairie on loamy soils with slope <5%) during early spring of 2009.

Table 1. Burns providing potential nesting habitat for mountain plover on the Grassland.

Allotment	Acres Burned	Grazing Association	Comments
Aubrey Trail	570	Campo	Burn in May was very green with little bare ground present.

Colonies: During May and early June, prairie dog towns were grid-surveyed in conjunction with burrowing owl, swift fox and Long-billed curlew surveys. A total of six colonies and approximately 780 acres was surveyed on the Carrizo Unit of the Comanche NG, but no surveys were conducted on the Timpas Unit. On the Carrizo Unit, the colonies expanded in size dramatically during 2003 - 2005, but most were declining in prairie dog density and distribution in spring of 2006 due to plague. This trend continued in 2007-2008 and an upward trend is beginning in 2009.

Table 3. Prairie dog colony surveys on the Carrizo Unit of the Comanche NG, 2009

Allotment	Colony Name	Date	Plover #/nest	Notes
Vega	8D-2	May 4	0	3 burrowing owls
Richards	17be-1	May 13	0	2 burrowing owls
3 Awn	8F-SW	June 3	0	4 burrowing owls
Carrizo Swing	RC-01	June 3	0	
Mountain plover	14E-1	June 3	0	
Reader Lake	5F-3	June 3	0	Swift fox den

Results:

Surveys of the Carrizo Unit did not document any nesting mountain plovers. Overall, survey results from 2009 indicate few plovers are utilizing the burn and prairie dog colonies on the Comanche National Grasslands. There is some recovery of prairie dogs from the plague on the Carrizo Unit which could increase Mountain plover nesting in the future.

Total acreage of colonies on the Carrizo Unit:

Year	Acres
2009	4581
2008	2542
2007	3014
2006	5786
2005	14387

Literature Cited

Svingen, D. and K. Giesen (1999). Mountain Plover (*Charadrius montanus*) response to prescribed burns on the Comanche National Grassland. Journal of the Colorado Field Ornithologists **33**(4): 208-212.